UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,847	02/06/2002	Densen Cao	5061.12 P	8519

7590 12/17/2003

Parsons, Behle & Latimer
201 South Main Street, Suite 1800
P.O. Box 45898
Salt Lake City, UT 84145-0898

EXAMINER	
LEWIS, RALPH A	
ART UNIT	**PAPER NUMBER**
3732	

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/071,847	CAO, DENSEN	
	Examiner	Art Unit	
	Ralph A. Lewis	3732	

-- The MAILING DATE of this communication appears on the cov r sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-17 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Rejections based on Obvious-type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 12-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent No. 6,331,111. The patented claims of 6,331,111 set forth all the limitations of the present claims, but patented claims are presented in a more detailed narrower version than those of the present application. Merely setting forth the already patented structure in broader terms would have been obvious to one of ordinary skill in the art. More particularly, the claimed well in the patented claims (e.g. column 16, lines 53-54) meets the presently claimed "first reflective device" limitation, the patented "focus dome" (column 17, line 46) meets the presently claimed "focusing lens" limitation and the patented "flexible section" (column 17, line 11) meets the presently claimed "second light reflective device" limitation

Claims 12-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over

claims 1-20 of copending Application No. 10/016,992;
claims 1-20 of copending Application No. 10/017,272;
claims 1-20 of copending Application No. 10/017,454;
claims 1-20 of copending Application No. 10/017,455;
claims 1-23 of copending Application No. 10/067,692;
claims 1-17 of copending Application No. 10/072,462;
claims 1-18 of copending Application No. 10/072,613;
claims 1-19 of copending Application No. 10/072,635;
claims 1-23 of copending Application No. 10/072,826;
claims 1-20 of copending Application No. 10/072,852;
claims 1-17 of copending Application No. 10/072,831;
claims 1-20 of copending Application No. 10/072,850;
claims 1-20 of copending Application No. 10/072,853;
claims 1-20 of copending Application No. 10/072,859;
claims 1-20 of copending Application No. 10/073,672;
claims 1-20 of copending Application No. 10/073,819;
claims 1-20 of copending Application No. 10/073,822;
claims 1-19 of copending Application No. 10/073,823; and
claims 1-20 of copending Application No. 10/076,128.

The limitations of the present claims all appear to broader or slightly different obvious versions of the pending claims in the above identified applications. Merely leaving out limitations (e.g. the "wall outlet power adapter" of claim 1 in 10/016,992) in order to make the claims broader or providing for different groupings of the elements set

forth in the claims of the above identified pending applications would have been obvious to the ordinarily skilled artisan.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Rejections based on Prior Art

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kovac et al (US 6,200,134).

Kovac et al disclose in Figure 4 a heat sink 64, semiconductor chips 60, focusing lens 70 and light reflective device 67.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovac et al (US 6,200,134) in view of Wurster et al (US 4,281,368) and Forehand et al (US 6,089,740).

Kovac et al disclose in Figure 4 a heat sink 64, semiconductor chips 60, focusing lens 70 and light reflective device 67, but fails to disclose the claimed first light reflective device. The use of parabolic reflectors around light sources to reflect light coming at an angle from the light source forward is old and well known to anyone familiar with a common flashlight. Such parabolic reflectors have commonly been used dental lights for reflecting the light forward to a lens and light reflector/conductor as shown by Wurster (parabolic reflector 1, lens 9, second light reflector 4) and Forehand et al (parabolic reflector 101, lens 14, second light reflector 106). To have provided Kovac et al with a parabolic reflector (i.e. "first light reflective device") to reflecting the light forward to a lens 70 and light reflector/conductor 67 as is common in the art would have been obvious to one of ordinary skill in the art.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovac et al (US 6,200,134) in view of Wurster et al (US 4,281,368) and Forehand et al (US 6,089,740) as applied above and in further view of Mills (WO 99/16136).

Kovac et al while further disclosing the claimed pistol grip, air space, fan 42 and presumably housing air vent (in order for the fan to work), fails to disclose the claimed secondary heat sink and thermo electric cooler. Mills, however, for a similar dental curing light discloses in Figure 5 that it is desirable to connect a primary heat sink 48 on which the Leds 43 are mounted to an elongated secondary heat sink 45, a thermoelectric cooler 50 and a fan 49 for circulating air past the thermoelectric cooler. To have enhanced the cooling system of Kovac et al by providing for an elongated secondary heat sink attached to the primary heat sink and the use of a thermoelectric cooler as taught by Mills would have been obvious to one of ordinary skill in the art in order to improve the cooling of the Kovac et al device.

Prior Art

Applicant's information disclosure statements of February 06, 2002 and August 14, 2002 have been considered an initialed copy enclosed herewith.

Adam et al (6,419,483 B1), Boutoussov et al (US 6,439,888 B1), Fregoso (US 6,611,110 B1), Bianchetti et al (EP 1 090 607 A1) and Reipur (WO 02/33312 A2) are made of record.

Any inquiry concerning this communication should be directed to **Ralph Lewis** at telephone number **(703) 308-0770.** Fax (703) 872-9306. The examiner works a compressed work schedule and is unavailable every other Friday. The examiner's supervisor, Kevin Shaver, can be reached at (703) 308-2582.

R.Lewis
December 13, 2003

Ralph A. Lewis
Primary Examiner
AU 3732